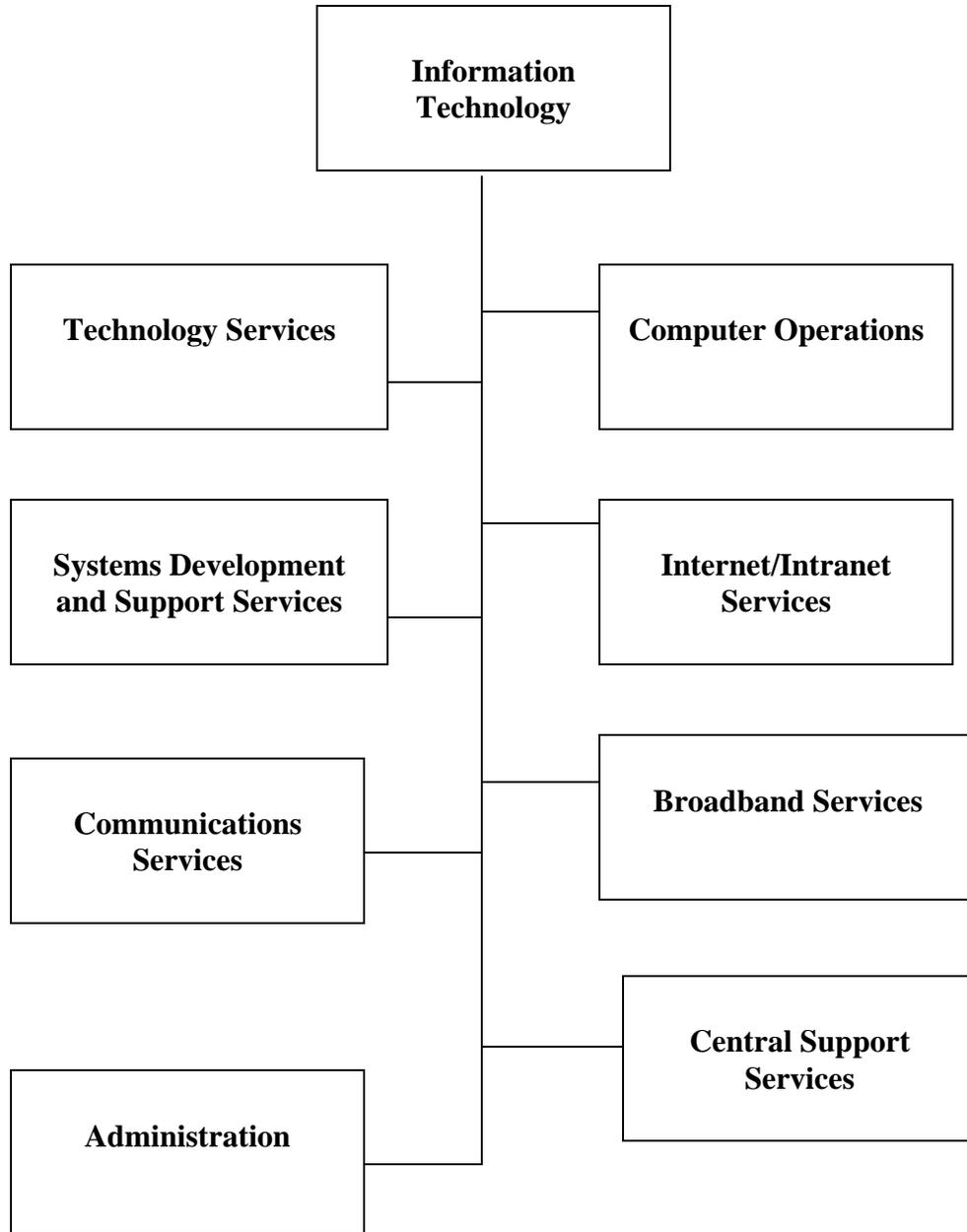


Information Technology



Information Technology

MISSION

The mission of the Department of Information Technology (DIT) is to provide effective, accurate, and reliable information, communications, and office automation systems and services to all County departments, the courts, constitutional officers, and the public schools.

DESCRIPTION

The Department of Information Technology provides information and office automation systems and services to the departments of the County government and public school system and radio communications and video services to the County's public safety agencies and volunteers. The department provides services on a 24-hour per day, 7 day per week basis. County information systems provide data processing and management information for key County and School activities including tax administration, public safety dispatching, school administration, land development and fiscal management. Services provided to County and School staffs cover a range of activities including training, problem solving, hardware maintenance, systems development, network management, video services, radio communications, telecommunications, records management, copying services, mail, surplus and courier service. The department's services are provided through five programs plus Central Support Services, which is included in the Central Services Fund.

BUDGET OVERVIEW

FY 07 Issues, Challenges & Trends:

- The challenges associated with growth in the community manifests itself in demands for new or updated information systems by County and public school departments, the expansion of computer networks to new facilities, and the support of increasing numbers of personal computers, associated equipment, and software.
- Competing for IT resources to implementation of new systems and services is the requirement to update and replace existing technologies due to the fast pace of technological change. Technological change creates the requirement to evaluate new technologies and to replace and update existing technologies on a selective and thoughtful basis.
- Achieve compliance with ADA (Americans with Disabilities Act) website requirements.
- The Board of Supervisors' initiative to expand the delivery of broadband internet services to County residents and businesses continues to be a department initiative and challenge for FY 07.
- The provision of adequate support of technologies required for the County government telework initiative, pilot projects, and staff teleworkers is an increasing role of the department.

FY 07 Major Goals:

- Implement or replace seven information systems for the public schools and County government.
- Provide network services to eight additional public school and County government facilities.
- Implement ADA and financial audit management letter recommendations.
- Continue the implementation of mobile communications and reporting for the public safety agencies.
- Provide information and recommendations to the Board of Supervisors for the expansion of community broadband services for residents and businesses in the County.
- Provide technological solutions that facilitate and enhance the effectiveness of the County government's telework initiative.

FY 06 Major Achievements:

- Extended the county/public school network to nine additional facilities.
- Implemented 200 mobile data computers and reporting systems for use in field-based Sheriff's cruisers.
- Implemented nine new information systems for the county government and public schools.
- Implemented the Reverse 911 and Citizen Alert System for public safety and other departments.
- Expanded the wide area network to include five new schools.
- Implemented the additional 800 MHz public safety radio channels.

Information Technology

Department Financial Summary

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| Expenditures | | | | | |
| Personnel | \$6,033,525 | \$6,324,580 | \$6,714,606 | \$7,456,000 | \$8,275,000 |
| Operations & Maintenance | 5,727,055 | 5,928,749 | 6,129,247 | 6,149,000 | 6,934,000 |
| Capital Outlay | 1,440,682 | 1,552,529 | 736,955 | 1,217,000 | 1,331,000 |
| Total Expenditures: | \$13,201,262 | \$13,805,858 | \$13,580,808 | \$14,822,000 | \$16,540,000 |
| Departmental Revenue | | | | | |
| Cable Franchise Fees | \$0 | \$0 | \$0 | \$200,000 | \$154,000 |
| Revenue: | \$0 | \$0 | \$0 | \$200,000 | \$154,000 |
| Public Safety Communications Fund: | | | | | |
| | \$1,945,515 | \$2,344,992 | \$2,445,947 | \$2,850,000 | \$3,401,000 |
| Local Tax Funding: | \$11,255,747 | \$11,460,866 | \$11,134,861 | \$11,772,000 | \$12,985,000 |
| FTE Summary: | 79.39 | 76.39 | 74.39 | 78.39 | 81.39 |

FY 07 Board Action: The FY 07 Adopted Fiscal Plan for Information Technology includes enhancements totaling 2.00 FTE and \$201,000 in the Public Safety Communications Fund for one systems engineer and one senior systems programmer, and additional local tax funding for systems support, telephones and internal services. The FY 07 budget also reflects the addition of 1.00 FTE transferred from Management & Financial Services in mid-year FY 06, and funding for implementation of compensation increases and increased benefits costs effective September 2006.

Information on scheduled projects on the Capital Asset Preservation Fund can be found in Volume 2 on tables beginning on page 606.

Budget History:

FY 03 Mid-Year: The department eliminated two systems analyst positions (2.00 FTE) and a web development specialist (1.00 FTE).

FY 04 Mid-Year: The department eliminated two program specialist positions (2.00 FTE) and one program manager position (1.00 FTE).

FY 05: 1.00 FTE was added to the Public Safety Communications Fund.

FY 05 Mid-Year: The Board added 1.00 FTE in mid-FY 05 for a Broadband Services Manager.

FY 06: The Board added 3.00 FTE for two systems analysts and a database administrator.

FY 06 Mid-Year: 1.00 FTE was transferred from Management & Financial Services to Computer Operations.

**For more information on the Central Services Fund see Volume 2 on page 648.*

Information Technology

Expenditures by Program

| Programs | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Technology Services | \$3,732,811 | \$3,405,806 | \$3,618,410 | \$3,428,000 | \$3,654,000 |
| Computer Operations | 3,596,687 | 3,488,789 | 2,909,962 | 3,207,000 | 3,393,000 |
| Systems Development | 3,737,166 | 3,906,570 | 4,000,441 | 4,286,000 | 5,012,000 |
| Internet/Intranet Services | 414,824 | 416,402 | 432,113 | 469,000 | 522,000 |
| Communications Services | 1,399,577 | 2,254,572 | 2,221,022 | 2,850,000 | 3,401,000 |
| Broadband Services | 0 | 0 | 46,190 | 200,000 | 154,000 |
| Administrative Support | 320,197 | 333,719 | 352,670 | 382,000 | 404,000 |
| Total | \$13,201,262 | \$13,805,858 | \$13,580,808 | \$14,822,000 | \$16,540,000 |

Revenues by Program

| Programs | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Technology Services | \$0 | \$0 | \$0 | \$0 | \$0 |
| Computer Operations | 0 | 0 | 0 | 0 | 0 |
| Systems Development | 0 | 0 | 0 | 0 | 0 |
| Internet/Intranet Services | 0 | 0 | 0 | 0 | 0 |
| Communications Services | 1,945,515 | 2,344,992 | 2,445,947 | 2,850,000 | 3,401,000 |
| Broadband Services | 0 | 0 | 0 | 200,000 | 154,000 |
| Administrative Support | 0 | 0 | 0 | 0 | 0 |
| Total | \$1,945,515 | \$2,344,992 | \$2,445,947 | \$3,050,000 | \$3,555,000 |

Local Tax Funding by Program

| Programs | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Technology Services | \$3,732,811 | \$3,405,806 | \$3,618,410 | \$3,428,000 | \$3,654,000 |
| Computer Operations | 3,596,687 | 3,488,789 | 2,909,962 | 3,207,000 | 3,393,000 |
| Systems Development | 3,737,166 | 3,906,570 | 4,000,441 | 4,286,000 | 5,012,000 |
| Internet/Intranet Services | 414,824 | 416,402 | 432,113 | 469,000 | 522,000 |
| Communications Services | (545,938) | (90,420) | (224,925) | 0 | 0 |
| Broadband Services | 0 | 0 | 46,190 | 0 | 0 |
| Administrative Support | 320,197 | 333,719 | 352,670 | 382,000 | 404,000 |
| Total | \$11,255,747 | \$11,460,866 | \$11,134,861 | \$11,772,000 | \$12,985,000 |

Staffing by Program

| Programs | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|----------------------------|-----------------|-----------------|-----------------|------------------|------------------|
| Technology Services | 19.00 | 20.00 | 18.00 | 18.00 | 18.00 |
| Computer Operations | 13.87 | 13.53 | 13.53 | 14.53 | 14.53 |
| Systems Development | 34.19 | 32.86 | 31.86 | 33.86 | 34.86 |
| Internet/Intranet Services | 5.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Communications Services | 2.33 | 2.00 | 3.00 | 3.00 | 5.00 |
| Broadband Services | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |
| Administrative Support | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Total | 78.39 | 76.39 | 74.39 | 78.39 | 81.39 |

Information Technology - Technology Services

DESCRIPTION

This program provides technical support services to County Government offices, community centers, libraries, public school administrative offices, school buildings, and other facilities. Services include equipment and software installation, troubleshooting and repair, training, equipment upgrades and replacements, asset control, management and administration of the County Email System, and Help Desk services. The Town of Leesburg and the Town of Purcellville administrative offices are also connected to the County's wide-area network and are provided Internet access, firewall services, virus scanning, and other services. On-going PC software training is provided to County Government and the Public School staff.

BUDGET OVERVIEW

FY 07 Issues:

- Continue to provide timely support, to implement new and innovative technologies, and to maintain customer satisfaction in an expanding, dynamic, and increasingly complex technological environment with restrictive work force and budgetary practices.

FY 07 Challenges:

- Provide satisfactory customer support for an increasing number of PCs and networked facilities.
- Provide adequate manpower and other support resources for the integration of newly adopted technologies such as Blackberries, Teleworking, VOIP, and wireless networks and devices into the county government and public school technological environment.
- Maintain a balance between customer satisfaction, financial considerations, and employee morale while achieving results and maintaining an adequately trained technology staff.
- Reduce the Countywide PC replacement cycle from five years to four years.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Expenditures | | | | | |
| Personnel | \$1,460,862 | \$1,473,383 | \$1,409,654 | \$1,561,000 | \$1,732,000 |
| Operations & Maintenance | 1,994,693 | 1,716,382 | 1,903,748 | 1,793,000 | 1,882,000 |
| Capital Outlay | 277,256 | 216,041 | 305,008 | 74,000 | 40,000 |
| Total Expenditures: | \$3,732,811 | \$3,405,806 | \$3,618,410 | \$3,428,000 | \$3,654,000 |
| Local Tax Funding: | \$3,732,811 | \$3,405,806 | \$3,618,410 | \$3,428,000 | \$3,654,000 |
| FTE Summary: | 19.00 | 19.00 | 20.00 | 18.00 | 18.00 |

Information Technology - Technology Services

Planned Accomplishments/Objectives for FY 07

Goal: Connect new Schools and County facilities to the County network.

Objective: Increase the number of County Government and Public School facilities networked as a percent of total facilities networked.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|----------------------|------------------------|
| Number and percent of facilities networked | 145/100% | 154/100% | 163/100% | 171/100% |
| FY 06 – Connect 5 new schools, new ADC, new school admin building, Hamilton F&R, F&R Bld. | N/A | N/A | 100% | Completed |
| FY 07 - Connect 2 Group Homes, 2 Town Homes, new EOC, Moorefield PS, Purcellville F&R, Carver Senior Ct. | N/A | N/A | N/A | 100% |

Goal: Maintain a County staff customer satisfaction rating of 95% for office automation and network services.

Objective: Close 70% of service call requests within 48hrs.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|----------------------|------------------------|
| Desktop Computer user satisfaction rating for personal computer and network support services | 98% | 94% | 92% | 92% |
| Percentage of calls closed within 48 hours | 57% | 88.5% | 70% | 70% |

Goal: Provide Personal Computer Training to an increasing county and public school staff and maintain a staff satisfaction rating of 95%.

Objective: Improve Countywide knowledge through IT training classes.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|----------------------|------------------------|
| Confidence level before class | N/A | 67% | 34% | 34% |
| Confidence level after class | N/A | 88% | 90% | 90% |
| Overall employee satisfaction rating for personal Computer Training | 98% | 95% | 95% | 95% |

Information Technology - Technology Services

Planned Accomplishments/Objectives for FY 07 - Continued

Goal: Provide reliable automation infrastructure through replacement and upgrade of existing technologies.

Objective: Upgrade and replace Netware servers, implement fault tolerant network switches, reduce the PC replacement cycle from five to four years.

| | Actual FY 04 | Actual FY 05 | Est FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|----------------------|------------------------|
| <i>Performance Measures</i> | | | | |
| Replace eight (8) NetWare servers (% completed) | N/A | N/A | 50% | 100% |
| Upgrade network switches to support fault tolerance (% completed) | N/A | N/A | N/A | 100% |
| Upgrade sixteen (16) Netware servers to version 6.5 (% completed) | N/A | 27% | 60% | 100% |
| Upgrade Treasurer's Sterling Office to high speed connection | N/A | N/A | 100% | Completed |
| Reduce the PC replacement cycle from five (5) to four (4) years | N/A | N/A | N/A | 100% |

Information Technology - Computer Operations

DESCRIPTION

This program is responsible for the operation of the County’s Data Center, which consists of three major functions: computer operations, systems programming, and information security. Computer operators perform computer console operations, print and distribute reports, and back-up the major computers and 130+ network file servers to centralized tape storage equipment. The systems programming function is responsible for ensuring that the software operating systems for the major computers are operational and up-to-date. This requires the monitoring of system performance, installation of new software releases, fixing “bugs,” and problem solving. Computer Operations is also responsible for the development and administration of the County’s information technology security program and policies. The security policies define the information and systems security responsibilities of DIT and the departments that use over 100 major County government and public school information systems and networks.

BUDGET OVERVIEW

FY 07 Issues:

- The aging infrastructure in the Information Technology Center building presents almost daily challenges. Cooling and power systems are over seventeen years old and although most are scheduled for replacement, the day-to-day operational status of the data center is frequently tenuous. A major project to replace the building uninterruptible power system is planned for FY 07.
- Work to establish a more robust Disaster Recovery plan that provides servers and communications facilities at the backup facility.
- The Public Safety Master Plan effort which will be presented as part of the FY 08 budget process will directly impact long term planning related to the use of the Information Technology Center.
- Integrity of County and schools information assets is imperative. Further expansion of wireless “hotspots” requires constant vigilance to insure information is secure and available to those who need it.

FY 07 Challenges:

- Incorporating Regional Department of Homeland Security initiatives and the projects related to the Federal Urban Area Security Initiative (UASI) grant.
- Addressing data exchange security and the use of evolving wireless networks.
- The activities related to the provision of secure IT services for use by teleworkers is increasing.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Expenditures | | | | | |
| Personnel | \$1,044,263 | \$1,125,039 | \$1,161,552 | \$1,248,000 | \$1,303,000 |
| Operations & Maintenance | 1,669,722 | 1,490,133 | 1,528,751 | 1,693,000 | 1,899,000 |
| Capital Outlay | 882,702 | 873,617 | 219,659 | 266,000 | 191,000 |
| Total Expenditures: | \$3,596,687 | \$3,488,789 | \$2,909,962 | \$3,207,000 | \$3,393,000 |
| Local Tax Funding: | \$3,596,687 | \$3,488,789 | \$2,909,962 | \$3,207,000 | \$3,393,000 |
| FTE Summary: | 13.87 | 13.53 | 13.53 | 14.53 | 14.53 |

Information Technology - Computer Operations

Planned Accomplishments/Objectives for FY 07

Goal: Comply with County financial auditor's recommendations related to disaster recovery.

Objective: Update disaster recovery plans, procedures and equipment.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Replacement of primary tape backup system for County Enterprise Server (% completed) | N/A | N/A | N/A | 100% |
| Implement backup servers at School Admin facility (% completed) | N/A | N/A | 10% | 15% |

Goal: Provide adequate computing availability for the on-time delivery of Countywide services.

Objective: Maintain operational availability of all major computer systems at 99% or better.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| Major computer availability | 99.3% | 99.3% | 99.5% | 99.4% |
| Process new county staff teleworkers through IT security review | N/A | 16 | 92 | 112 |

Information Technology - Systems Development and Support Services

DESCRIPTION

The Systems Development and Support program provides services for support of existing information systems and the development of new systems. Systems analysis and design, computer programming, and database administration services are provided to 33 County government departments, the Offices of the County Administrator, County Attorney, and Board of Supervisors; the Courts; and the public school system. 130 major information systems and subsystems are utilized by the County government and public schools and are maintained and supported by this program. Services are provided through five teams of programmer/analysts and systems analysts assigned to two of DIT's operating divisions.

BUDGET OVERVIEW

FY 07 Issues:

- Requests for new information systems and enhancements to existing systems from both County government and public school departments continue to be high. Other departmental requests for smaller system development projects required for minor enhancements and changes to existing information systems must be concurrently serviced.
- Continue modifying the development practices and procedures to achieve compliance with the financial auditor's management letter recommendations.

FY 07 Challenges:

- Balancing the requirement to constrain costs and staffing levels against the requirement to implement new systems on time and within budget and to provide timely enhancement services to existing systems remains a challenge.
- Modifying processes related to the County financial auditor's request to enhance the internal change control processes without incurring additional costs and staffing requirements will continue to be difficult.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Expenditures | | | | | |
| Personnel | \$2,709,342 | \$2,877,850 | \$3,107,265 | \$3,392,000 | \$3,719,000 |
| Operations & Maintenance | 994,195 | 981,866 | 824,293 | 894,000 | 1,293,000 |
| Capital Outlay | 33,629 | 46,854 | 68,883 | 0 | 0 |
| Total Expenditures: | \$3,737,166 | \$3,906,570 | \$4,000,441 | \$4,286,000 | \$5,012,000 |
| Local Tax Funding: | \$3,737,166 | \$3,906,570 | \$4,000,441 | \$4,286,000 | \$5,012,000 |
| FTE Summary: | 34.19 | 32.86 | 31.86 | 33.86 | 34.86 |

Information Technology - Systems Development and Support Services

Planned Accomplishments/Objectives for FY 07

Goal: Improve and enhance service delivery to County and public school departments through implementation of new information systems.

Objective: Begin implementation of four new information systems.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| Percent completed: | | | | |
| Management & Financial Services - Real Estate Assessment System | N/A | 10% | 100% | Complete |
| Sheriff's Department - Jail Management System | N/A | 10% | 100% | Complete |
| Sheriff's Department - Alarm Billing System | N/A | N/A | 100% | Complete |
| Sheriff's Department - Automated Vehicle Location System | N/A | N/A | 50% | 100% |
| Fire and Rescue Department - Records Management System Phase I | N/A | N/A | 100% | Complete |
| Human Resources - Online Personnel Action Forms | N/A | N/A | 100% | Complete |
| Human Resources - Online Employment Applications System | N/A | 10% | 100% | Complete |
| Public Schools - Special Education IEP System | N/A | 10% | 50% | 100% |
| Public Schools - Data Warehouse System Phase I | N/A | N/A | 100% | Complete |
| Social Services - Information Mgmt. System - Phase 1 | N/A | 10% | 100% | Complete |
| Public Safety and Other Departments - Roam Secure System | N/A | 80% | 100% | Complete |
| Department of Public Safety - Records Management System | N/A | N/A | 20% | 100% |
| County Administration - Customer Resource Mgmt. (CRM) System | N/A | N/A | 15% | 100% |
| Management & Financial Services - New Budget System | N/A | N/A | 15% | 100% |
| MH/MR/SA - Community Services Board's Client System | N/A | N/A | N/A | 100% |

Goal: Improve and enhance service delivery of County and public school departments through implementation of major enhancements to information systems.

Objective: Develop implementation plan of major enhancements to six information systems.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Percent completed: | | | | |
| Public Schools - Web enablement of the Student Information System | N/A | 5% | 50% | 50% |
| Building & Development - Phase I of the web enablement of the permits function in the Land Records System (LMIS) | N/A | N/A | 50% | 100% |
| Management & Financial Services and Public Schools - Assume system maintenance responsibility for the Financial System (FAMIS), improve system performance, and Web enable the core system functions | N/A | N/A | 50% | 100% |
| County & Public Schools - Benefits Systems changes for new Health Insurance Plan | N/A | N/A | 100% | Complete |
| Public Schools - Human Resources Systems changes for Employee Self Service Benefits | N/A | N/A | 25% | 100% |
| Payroll / HR / Benefits system upgrade (Cyborg 5.1) and conversion to DB2 - Public Schools | N/A | N/A | 50% | 100% |
| Payroll / HR / Benefits system upgrade (Cyborg 5.1) and conversion to DB2 - County Government | N/A | N/A | 50% | 100% |
| Public Schools - Online Purchasing Requisitions and Purchase Orders | N/A | N/A | 100% | Complete |
| Public Schools - Data Warehouse System Phase II | N/A | N/A | N/A | 100% |
| Building & Development/ Fire Marshal's - Mobile Inspectors | N/A | N/A | 25% | 100% |

Information Technology - Systems Development and Support Services

Planned Accomplishments/Objectives for FY 07 - Continued

Goal: Modify business practices to be in compliance with the County financial auditor's recommendations related to the County's change control process.

Objective: Maintain compliance with the auditor's recommendations.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Implement separation of staff duties per the auditor's recommendations (% completed) | N/A | 10% | 100% | Complete |
| Implement a change control system and procedures per the auditor's recommendations (% completed) | N/A | 15% | 80% | 100% |

Goal: Provide timely systems development implementation services to County and public school departments.

Objective: Develop and implement 90% of systems development projects on time.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| Percent of requests for systems development projects (estimated at more than 3 days to complete) completed on time: | | | | |
| Human Services | 94% | 90% | 90% | 90% |
| Finance | 93% | 84% | 90% | 90% |
| Land Records | 92% | 95% | 90% | 90% |
| Schools | 92% | 94% | 90% | 90% |
| Tax Administration | 95% | 95% | 90% | 90% |
| Maintain a 95% monthly closure rate for Public Safety System calls for assistance | 95% | 94% | 95% | 95% |

Information Technology - Internet/Intranet Services

DESCRIPTION

The Internet/Intranet Program is responsible for design, installation, and maintenance of systems that host the County government's Internet website and Intranet applications. The program develops applications that facilitate access to information in the County's major information systems. Other applications improve business processing by providing for collection of taxes and other fees via the Internet as well as the facilitation of information collection and communication.

BUDGET OVERVIEW

FY 07 Issues:

- Demand for Internet/Intranet services is high. The 40% increase in utilization of the County website between FY 04 and FY 05 demonstrates the public's desire to use web based services. These systems are accessed 7 x 24 x 365 and as such require highly available systems.
- The reliance by County staff on the internal forms and electronic paystubs is indicative of the broad support among County staff for more efficient online intranet based self-service applications as well as indicated a need for highly available systems.
- It is the goal of the Internet/Intranet Services program to work with County departments to improve internal County government processes, improve and add services provided to the public through the County website, and to increase quantity of information and options for the delivery of information to the public.
- The County website must maintain compliance with ADA (Americans with Disabilities Act) requirements.
- This program's web engineering resources also directly support the IT security functions within DIT and the increased use of the Virtual Private Network by the expanded County government teleworker program has significantly increased workload.

FY 07 Challenges:

- Balancing the demand for services against limited and static resources impedes the development of new web based systems and is a challenge.
- Comply with ADA regulations by expanding use of the content management system in the County's Internet and Intranet websites.
- Expanding the use of the County's newly, implemented web-casting system to meetings other than cable broadcast board meetings.
- Implementing new services, while being required to share web engineering resources with other IT programs.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| Expenditures | | | | | |
| Personnel | \$344,618 | \$358,194 | \$390,615 | \$407,000 | \$434,000 |
| Operations & Maintenance | 58,064 | 31,322 | 35,522 | 46,000 | 62,000 |
| Capital Outlay | 12,142 | 26,886 | 5,976 | 16,000 | 26,000 |
| Total Expenditures: | \$414,824 | \$416,402 | \$432,113 | \$469,000 | \$522,000 |
| Local Tax Funding: | \$414,824 | \$416,402 | \$432,113 | \$469,000 | \$522,000 |
| FTE Summary: | 5.00 | 4.00 | 4.00 | 4.00 | 4.00 |

Information Technology - Internet/Intranet Services

Planned Accomplishments/Objectives for FY 07

Goal: Provide quality Internet and Intranet services and web applications to residents and County employees.

Objective: Increase/enhance services for residents and County employees using web technology.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Number of new Web (Intranet and Internet) applications developed and implemented | 8 | 8 | 8 | 8 |
| Average number of monthly Internet user sessions on County website | 191,435 | 267,000 | 220,000* | 235,000 |
| Average number of monthly staff user sessions of the County Intranet | 66,887 | 62,000 | 84,000 | 90,000 |

*User sessions decrease because users are remaining on the website longer, thus viewing more web pages per session.

Goal: Improve effectiveness and efficiency for managing Internet/Intranet websites to reach ADA compliance.

Objective: Implement content management systems for the Internet and Intranet.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| All departments and agencies - Implement content management system for Internet (% completed) | N/A | N/A | 100% | Completed |
| All departments and agencies - Implement content management system for the Intranet (% completed) | N/A | N/A | 10% | 90% |

Goal: Implementation of new technologies.

Objective: Implement web-casting systems.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Increase use of web-casting system for meetings other than broadcast Board of Supervisor meetings (# of depts. using system) | 0 | 0 | 0 | 2 |
| Board of Supervisors - Implement web-casting and archiving of Board and public meetings (% completed) | N/A | N/A | 100% | Completed |

Information Technology - Communications Services

DESCRIPTION

This program, which is part of the Public Safety Communication Fund, is responsible for ensuring the working order and performance of the County government's radio communications systems which include the radio transmitters, radio console systems, eleven radio tower sites, hand-held and vehicle mounted mobile radios, the E-911 public safety communications equipment and the E-911 voice/radio recording equipment. The system provides radio and paging communication for Fire and Rescue Services, the volunteer Fire and Rescue Companies, the Sheriff, Animal Care & Control, and the police departments for the Towns of Leesburg, Middleburg, and Purcellville. There are also the radios in use by the Virginia Game Wardens serving Loudoun County, Northern Virginia Community College security, Commonwealth Attorney, Juvenile Probation, and the Treasurer's Office. This program also supports high speed microwave data communications equipment and is responsible for oversight of the critical power and cooling infrastructure in the Information Technology Center.

BUDGET OVERVIEW

FY 07 Issues:

- Work began in late FY 05 and will continue through FY 08 to comply with the Federal Communication Commission's recent ruling, which is designed to reduce interference to the 800 MHz radio systems by Nextel and other cellular operators. This will require Loudoun County to relocate its 800 MHz radio frequencies to other frequencies in the 800 MHz spectrum. The cost for the relocation project will be borne by Nextel Communications. Staff must provide project oversight over the activities of Motorola and other contractors that will be engaged to perform this work to insure ongoing availability of the public safety radio communications system.
- Phase III of the mobile data computer project for frontline fire and rescue apparatus is planned for completion in FY 07. This is the last phase to complete the deployment of mobile data for the Fire and Rescue system including volunteer apparatus. The program must also support the addition of radio equipment approved as part of the FY 07 budget.
- Support of aging infrastructure at the DIT facility is consuming communications staff time insuring that critical systems are maintained to the level necessary to insure there are no disruptions.

FY 07 Challenges:

- Maintaining public safety radio system availability at 99.99% while working with regional partners to insure the successful completion of the 800 MHz rebanding project with minimal disruption of the public safety radio system.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| Expenditures | | | | | |
| Personnel | \$167,195 | \$172,048 | \$282,606 | \$392,000 | \$587,000 |
| Operations & Maintenance | 997,428 | 1,693,394 | 1,800,987 | 1,598,000 | 1,740,000 |
| Capital Outlay | 234,954 | 389,130 | 137,429 | 860,000 | 1,074,000 |
| Total Expenditures: | \$1,399,577 | \$2,254,572 | \$2,221,022 | \$2,850,000 | \$3,401,000 |
| Public Safety Communications Fund: | \$1,945,515 | \$2,344,992 | \$2,445,947 | \$2,850,000 | \$3,401,000 |
| Local Tax Funding: | (\$545,938) | (\$90,420) | (\$224,925) | \$0 | \$0 |
| FTE Summary: | 2.33 | 2.00 | 3.00 | 3.00 | 5.00 |

Information Technology - Communications Services

Planned Accomplishments/Objectives for FY 07

Goal: Maintain public safety radio system reliability.

Objective: Maintain the Public Safety Radio System at the highest level of system availability.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|-----------------------------|-------------------------|-------------------------|-----------------------|------------------------|
| 800 MHz System Availability | 99.99% | 100% | 100% | 99.99% |

Goal: Comply with FCC ruling requiring rebanding of 800 MHz public safety radio system.

Objective: Negotiate contract with Motorola Communications and Nextel Communications for rebanding work and complete the system rebanding.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Negotiate and award a Motorola Communications contract for services (% complete) | N/A | N/A | 100% | 100% |
| Negotiate and award a Nextel Communications contract for services (% complete) | N/A | N/A | 100% | 100% |
| Reband the public safety radio system | N/A | N/A | 10% | 25% |

Goal: Maintain network reliability and enhance disaster recovery capabilities.

Objective: Maintain the high speed data microwave system that connects DIT to County Government backbone and school backup facility at the highest level of system availability.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| High speed microwave availability | N/A | N/A | 99.50% | 99.70% |
| Analyze options and develop a recommendation for the establishment of an IT disaster recovery site | N/A | N/A | N/A | 100% |

Information Technology - Communications Services

Planned Accomplishments/Objectives for FY 07 - Continued

Goal: Deliver emergency dispatch information via wireless technology to public safety first responders.

Objective: Completion of Phase III of the Fire & Rescue mobile data project.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| Phases I and II of Mobile Data Computer project completed (% completed) | N/A | N/A | 100% | N/A |
| Phase III of Mobile Data Computer project (% completed) | N/A | N/A | N/A | 100% |
| Automatic Vehicle Locations (AVL) and enroute mapping (% completed) | N/A | N/A | 50% | 100% |

Information Technology - Broadband Services

DESCRIPTION

The intent of this program is to investigate and propose ways that the County government and Board of Supervisors can better promote and deliver broadband internet services to residents and business entities in the County. This program was created by the Board of Supervisors in December, 2005 and was initially established as a temporary two year program. A full time position was established in April 2005 to focus on this initiative.

BUDGET OVERVIEW

FY 07 Issues:

- Broadband services was established by the Board as a temporary program to analyze the requirements and needs of the community including residents, businesses, and government entities, and to develop strategies for improving access to residential broadband, business broadband, and the Countywide internal network called iNet. Proposed alternative actions are to be presented to the Board of Supervisors for their consideration, followed by implementation of action plans as directed. Funding for this program will not be available in FY 08.
- This program has since become engaged in supporting the County's telework program.

FY 07 Challenges:

- Developing alternative visions and action plans for the expansion of Countywide broadband services that are cost effective and give consideration to the financial impacts upon the County and its taxpayers.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|--------------------------------|-----------------|-----------------|-----------------|------------------|------------------|
| Expenditures | | | | | |
| Personnel | - | - | \$25,476 | \$96,000 | \$116,000 |
| Operations & Maintenance | - | - | 20,714 | \$104,000 | 38,000 |
| Total Expenditures: | \$0 | \$0 | \$46,190 | \$200,000 | \$154,000 |
| Revenue | | | | | |
| Cable Franchise Fees | - | - | \$0 | \$200,000 | \$154,000 |
| Total Revenue: | \$0 | \$0 | \$0 | \$200,000 | \$154,000 |
| Local Tax Funding: | \$0 | \$0 | \$46,190 | \$0 | \$0 |
| FTE Summary: | 0.00 | 0.00 | 0.00 | 1.00 | 1.00 |

Information Technology - Broadband Services

Planned Accomplishments/Objectives for FY 07

Goal: INet – Upon direction from the Board of Supervisors – Develop, publish, and award RFP for development and build out of fiber optic loop infrastructure. Supervise and oversee efforts of deployment and integration of fiber into daily DIT operating structure.

Objective: Ensure fiber optic ring is deployed to decrease telecom cost to the County and increase services offered in government. Deployed fibers could also be used by private companies for broadband development.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Develop and publish RFP for fiber optic service with drops in multiple locations of the County as defined by the Board of Supervisors (% completed) | N/A | N/A | 100% | 100% |
| Historical -- Develop INet and business build analysis and possible actions for the BOS to take to improve level of services to County residents. (% completed) | N/A | 10% | 100% | 100% |

Goal: Residential – Upon direction from the Board of Supervisors – Pursue a residential broadband implementation strategy to improve broadband connectivity to residents in the most direct and cost effective means needed.

Objective: Increase broadband availability in Loudoun County.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|--|-------------------------|-------------------------|-----------------------|------------------------|
| Based on recommendations from staff and Dynamic City on increasing broadband services in Loudoun -- Implement Board of Supervisors directives. * | N/A | Gathering Data | TBD | TBD |
| Historical -- Conduct meetings with residential HOAs and homeowners on broadband access and community needs. Meetings in Planning Areas | N/A | 4 / 22% | 18 / 100% Meetings | 18 / 100% Meetings |
| Historical -- Determine available service for residential and business broadband customers. Gather data on wire line and wireless providers | N/A | Determine Need for RFP | 100% | Completed |

*Present recommendations to Economic Development Commission in February 2006.

Information Technology - Broadband Services

Planned Accomplishments/Objectives for FY 07 - Continued

Goal: Business – Upon direction from the Board of Supervisors – Implement plans and policies to increase broadband connectivity to businesses in Loudoun County.

Objective: Increase knowledge base of broadband business services and providers in Loudoun County.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|------------------------|--------------------------|
| Continue to meet with and serve as resource to business focused land developers to educate about broadband needs and broadband environment in Loudoun County. | N/A | Begin | Ongoing | Ongoing |
| Develop database of buildings that have fiber connectivity that can be used for economic development purposes (% completed). | N/A | 5% | 50% | 90% |
| Maintain database of fiber locations and fiber paths in Loudoun County (% completed). | N/A | 5% | 50% | 90% |
| Conduct surveys with residential, business, and government leaders regarding broadband initiative – Conduct interviews to gauge next steps to increase broadband access (number of meetings and percent progress) | N/A | 20 / 17% | 80 / 66% Interviews | 120 / 100% Interviews |

Information Technology - Administrative Support

DESCRIPTION

The services provided by this program include the overall general management of the Department of Information Technology, administrative and clerical support to the department, performance of management studies, and strategic planning. The general management function includes the development of the annual information systems plan for the County government and the public school system, the development and administration of Countywide information system budgets, and the general management of the department. Administrative services include processing the departmental payroll, registration of County and school system employees into PC software training classes, preparation of purchase orders and payment of bills, reception, and general clerical support for the department. The department purchases or approves the purchase of all computer hardware and software used in county departments and agencies. Participation in management studies and participation in general management functions of the County government are also included in this program.

BUDGET OVERVIEW

FY 07 Issues:

- The transfer of the Central Support Services to the Department of Information Technology in FY 05 and the assignment of the Broadband initiative to the department in mid-year FY 05 were accomplished without increases in administrative support staff.

FY 07 Challenges:

- Maintaining satisfactory performance levels given the increases in day-to-day activities in the office as the department adds staff, functions, programs, and services will be a challenge.
- Addressing the level of PC purchasing activities associated with personal computer replacements including equipment specification, receiving, inventorying, and scheduling will be a challenge as the number of annual PC replacements increases with the reduction in the replacement cycle from 5 to 4 years.

| Departmental Financial Summary | FY 03 Actual | FY 04 Actual | FY 05 Actual | FY 06 Adopted | FY 07 Adopted |
|--------------------------------|------------------|------------------|------------------|------------------|------------------|
| Expenditures | | | | | |
| Personnel | \$307,245 | \$318,066 | \$337,438 | \$360,000 | \$384,000 |
| Operations & Maintenance | 12,952 | 15,653 | 15,232 | 22,000 | 20,000 |
| Total Expenditures: | \$320,197 | \$333,719 | \$352,670 | \$382,000 | \$404,000 |
| Local Tax Funding: | \$320,197 | \$333,719 | \$352,670 | \$382,000 | \$404,000 |
| FTE Summary: | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |

Information Technology - Administrative Support

Planned Accomplishments/Objectives for FY 07

Goal: Enhance Countywide service delivery through the timely acquisition of appropriate information technology products, software, and services for all county departments.

Objective: Coordinate and conduct County government-wide purchasing of information products, software and services.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| Number of IT purchase orders processed | 880 | 1,258 | 1,092 | 1,192 |
| Number of IT Request for Proposals prepared and processed | 6 | 3 | 4 | 4 |

Goal: Provide administrative support to department programs to ensure efficient operation.

Objective: Perform departmental administrative processing tasks on time.

| <i>Performance Measures</i> | Actual FY 04 | Actual FY 05 | Est. FY 06 | Proj. FY 07 |
|---|-------------------------|-------------------------|-----------------------|------------------------|
| Number of DIT programs supported | 5 | 8 | 8 | 8 |
| Number of personal computer training programs scheduled | 44 | 43 | 41 | 41 |